After Much Economic Diversification, B.C. Exports Are Still Mainly Resource Based

Relatively Few Jobs Now Depend Directly On Resource Industries

British Columbia used to be known as a place where a lot of people worked in forestry, fishing and mining. This is still true for many regions of the province, but it has long since ceased to be an accurate description for British Columbia as a whole. In the urban centres where more and more people live, very few jobs are directly related to natural resource processing.

Out of 1,906 thousand employed British Columbians in 1999, only 49 thousand worked at logging, fishing, mining, or oil and gas extraction. Another 42 thousand worked in sawmills and other solid wood processing plants, 22 thousand worked in pulp and paper mills, and 9 thousand worked at metal smelting.

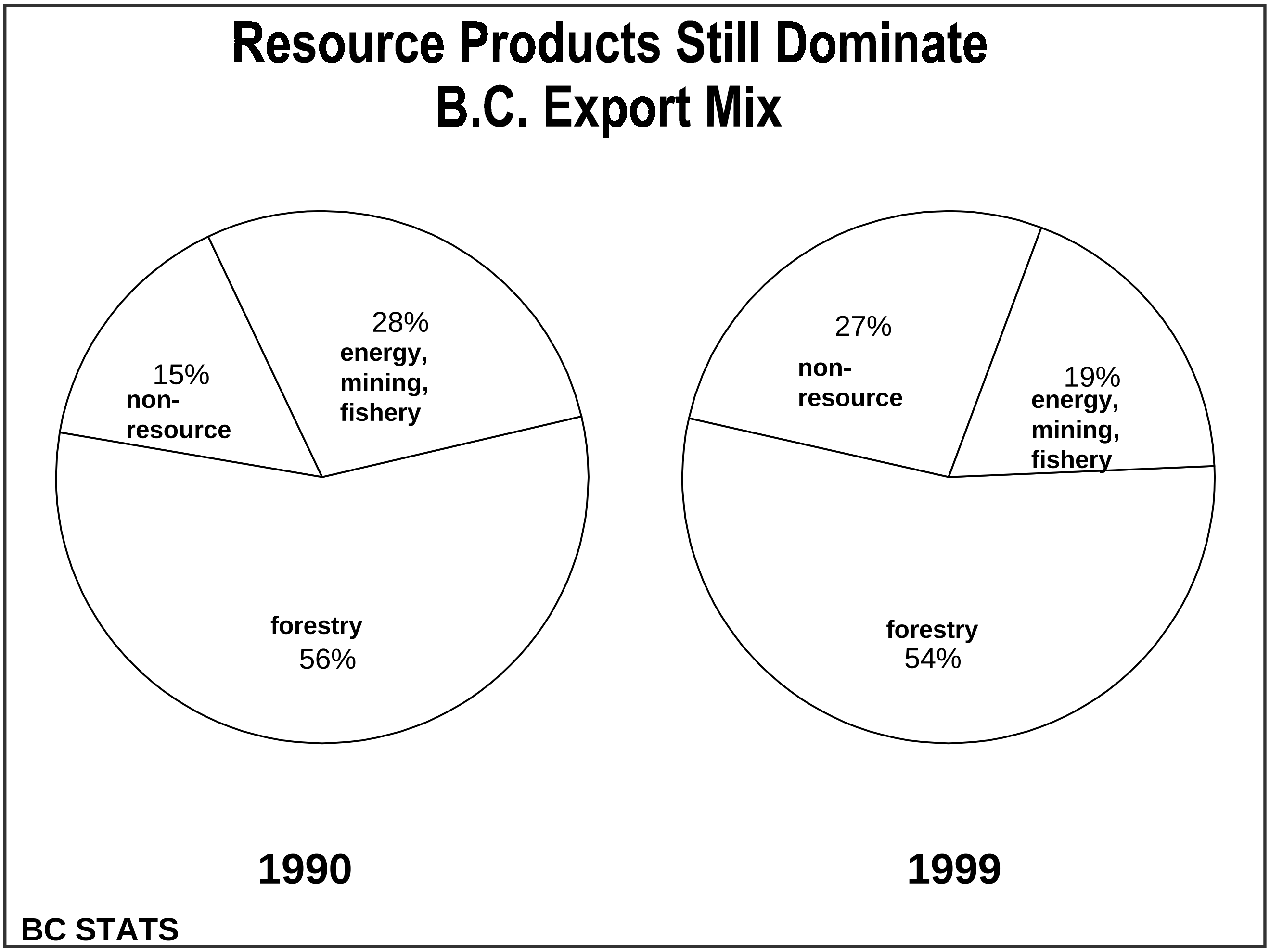
Taken together, these 122 thousand workers amounted to 6 per cent of the total provincial workforce, down from 8 per cent in 1990. Of course the jobs of many more workers depended indirectly on resource industries. But even with these other jobs considered, only a fairly small minority of British Columbians rely on resource industries for their livelihood.

The diminished importance of resource industries in most aspects of the British Columbia economy is reflected in gross domestic product numbers. The contribution of forestry, fishing and mining to provincial gross domestic product shrank from 12 per cent in 1984, to 11 per cent in 1990, to 10 per cent in 1994, to 9 per cent in 1999.

Yet resource industries still produce well over half the value of all British Columbia – exports, generate a substantial part of provincial government revenues, and provide the principal employment base for people living over much of the province's geographic area.

While the more diversified economies of urban centres generate goods and services mainly for domestic consumption, the forestry, mineral and fishery dominated economies over much of the hinterland are focussed on producing raw or semi-processed commodities destined for export markets. Resource commodities account for most international exports shipped from the province. Although they accounted for only about 9 per cent of gross domestic product in 1999, resource industries produced over 70 per cent of provincial exports.

While resource products still dominate provincial exports, they are less dominant than they were at the beginning of the last decade. In 1990, resource products accounted for 84 per cent by value of all British Columbia goods shipped to international markets.

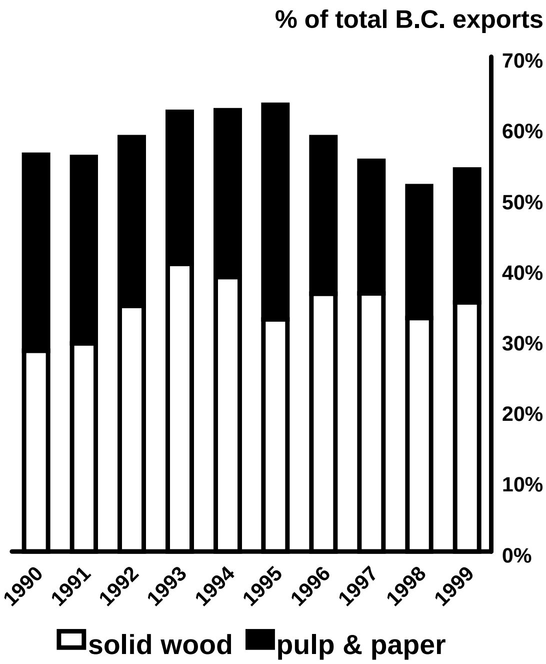


Forest Products Account For Over Half of B.C. Exports

The great bulk of British Columbia resource exports are produced by the forest industry. Growth in the value of forest exports has generally kept pace with overall export growth, so that forest exports are about as prominent now in the overall provincial export mix as they were at the beginning of the last decade.

In 1999, lumber products, pulp, paper and other forest commodities together accounted for 54 per cent of the total value of all British Columbia exports. In 1990 they accounted for 56 per cent. The value of forest product exports has always swung up and down from year to year with the vagaries of international commodity markets. This pattern continued through the 1990s, but with no clear evidence that forest products are becoming either more or less important within the provincial export mix.

Forest Products Still Over Half of Total B.C. Exports

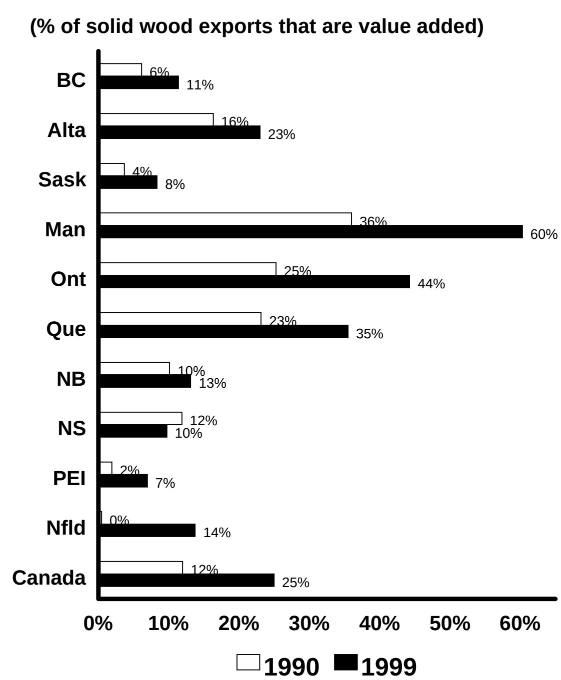


BC STATS

There are obvious natural limits to exports of raw or semi-processed forest products as annual forest yields approach or exceed sustainable levels. They may already have reached those levels, but the value of forestry exports may yet be pushed higher by increasing value added content. That objective is, of course, a constant preoccupation of provincial economic planners.

Over most of the 1990s, British Columbia's value added wood exports grew less quickly than value added wood exports from other provinces. The result is that British Columbia now ships a markedly higher portion of its solid wood exports in the form of raw lumber than most other provinces. Its ratio of value added wood exports to total solid wood exports was 11 per cent in 1999. This compared with 23 per cent for Alberta, 44 per cent for Ontario, 35 per cent for Quebec, and 25 per cent for Canada as a whole.

Value Added Products Still Small Part of B.C. Wood Product Exports



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Fishery and Metallic Mineral Exports Now Relatively Minor

While total forest industry exports have kept pace with overall exports, exports of fishery and mining commodities have not. These products now account for much smaller parts of the province's total exports than they did at the beginning of the decade.

Two of the main causes have been increased international competition for metallic ores and concentrates, and shrinking fish stocks for fishery products.

But even without these difficulties, it might be expected that exports of many raw or semi-processed resource commodities should lag overall export growth. As it has diversified, British Columbia's economy has generated a steadily increasing output of secondary manufactured products that are not derived from the its natural resource base. As secondary manufacturing industries have expanded, exports of these new products have grown faster than the raw or semi-processed commodity exports of mature resource industries. Assuming that British Columbia continues its long process of industrial diversification, these trends can be expected to continue well into the future.

The combined effects of special problems faced by resource industries and relatively faster export growth for non-resource based industries left British Columbia considerably less dependent on resource exports in 1999 than it had been at the beginning of the decade. Between 1990 and 1999, the resource product component of provincial exports shrank by 12 percentage points, from 85 per cent to 73 per cent.

Shrinking values of fishery product exports produced part of this drop, declining gradually from 5 per cent of total provincial exports in 1990, to only 3 per cent in 1999.

But the picture for fishery exports is far from universally bleak. While some of the province's most important traditional fisheries have suffered serious setbacks in recent years, new fisheries have been emerging that could reverse negative export trends. For example, more attention is now being paid to groundfish such as hake and ling cod. Aquaculture production of salmon, other finfish or molluscs has the potential to expand further through the use of new technologies. These developments have been encouraged by expanding world markets for high value seafood products.

The outlook for the mining industry is less hopeful. Both coal and metal ore exports from British Columbia have been facing intense competition in world markets.

There has been little or no long term growth in the value of exports of metal ores or concentrates over the past decade, so that the portion of total provincial exports accounted for by these commodities has shrunk considerably. Metal ores and concentrates accounted for just 1 per cent of total exports in 1999, down from 6 per cent in 1990. They are now valued at less than exports of either plastic products or clothing.

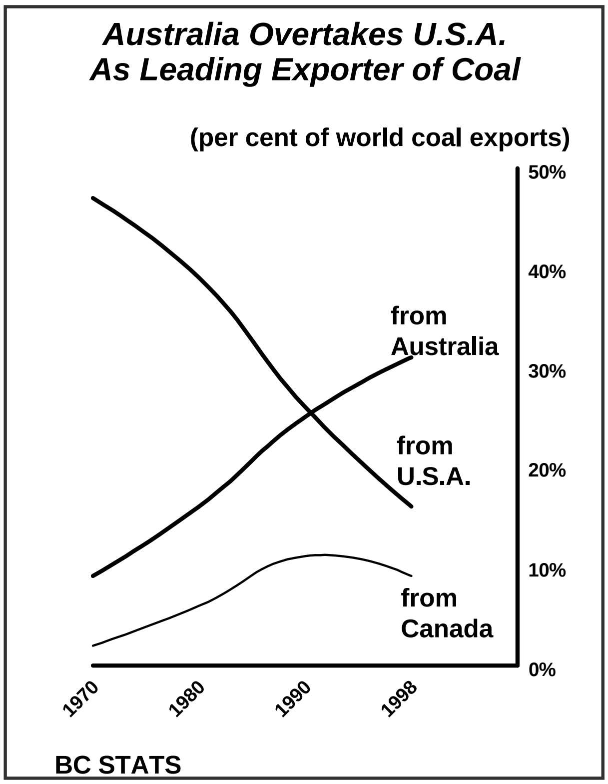
An Uncertain Time For Coal Exports

Coal is easily the most important mining export shipped from British Columbia. Most is metallurgical coal destined for the steel smelters of Japan and South Korea. Smaller amounts are shipped periodically to customers in Europe, Latin America and other regions.

Reliance on Asian markets, and particularly Japan, has meant slow growth for coal exports during the 1990s. Coal exports fell off sharply after the Japanese economic crash in the early part of the decade. They were recovering up to 1997 but then fell off sharply again with the more widespread Asian economic crisis.

The chronic problem for British Columbia coal producers has been rising international competition. Competition in international markets has already forced the closure of mines in several countries, including some in British Columbia. To remain competitive, mines need high quality coal and access to reliable transportation at affordable prices. With more mines facing closure in the province there have been calls for cuts in rates charged coal shippers by railway and port operators.

The fiercest competition in international coal markets has come from Australia. For three decades Australia has been gaining larger shares of global coal markets, mainly at the expense of American producers. More recently Canadian coal exports have also been affected.



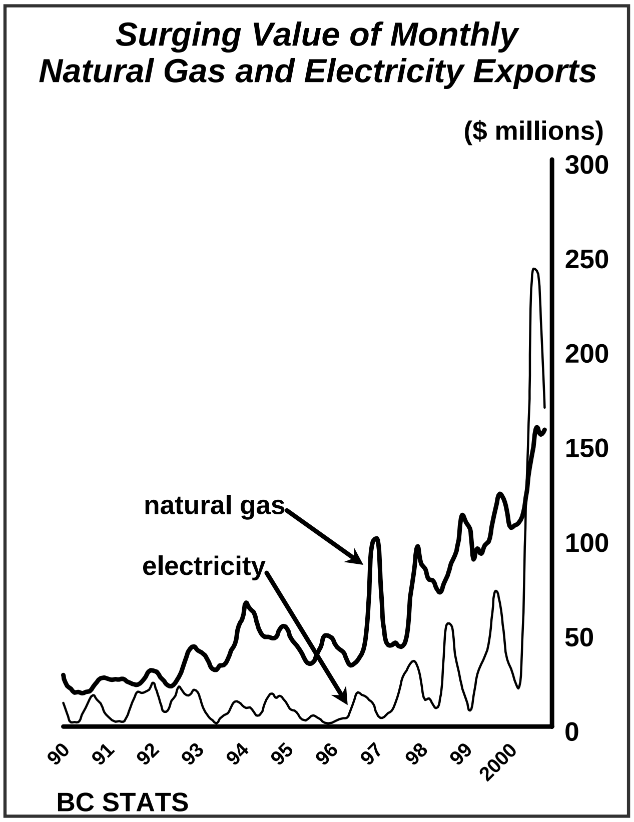
Future prospects for the industry in British Columbia are not judged to be very promising, at least in the short to medium term. The likely exceptions could be those few mines producing thermal coal. Higher prices for natural gas and electricity have considerably improved prospects for thermal coal exports. Unfortunately thermal coal presently accounts for very little of British Columbia's production. There is, however, some potential to expand shipments.

Another possibility for generating export revenues from the province's coal resources is coal bed methane (CBM). CBM is produced by drilling into unexposed coal seams to bleed off methane. The gas can be used for electrical power production.

Natural Gas and Electricity Exports Booming

Two recent bright spots in British Columbia's resource export picture are natural gas and electricity. They have become closely linked to each other in recent years as natural gas has become the preferred fuel for electrical power generation. The advantages of natural gas for power generation include low pollution (compared to coal) and low risk (compared to nuclear power). Considerably more pipeline capacity has been laid from British Columbia gas fields in recent years, providing producers with the means to expand their export sales.

Virtually all British Columbia natural gas exports go the United States. Rising consumption and good prices in that market produced a 400 per cent increase in the value of British Columbia natural gas exports between 1990 and 1999. In 1999 natural gas exports were valued at $1,273 million, almost equal in value to coal exports. In the first eleven months of 2000 they had reached $1,427 million, more than the value of coal exports, and still growing fast.



Natural gas promises to produce export revenues that are relatively secure by comparison with revenues from coal. Canadian and Mexican gas producers enjoy obvious advantages in the United States market because their product can be shipped more easily, cheaply and reliably by pipeline than by sea. Demand and price vary with season and, less predictably, with local weather and other factors. But over the long term the market is likely to be relatively secure because, once committed to gas, industrial and residential consumers cannot easily switch to alternative fuels.

Canadian electricity exporters enjoy much the same unique geographical advantages in the U.S. market. The fast rising use of natural gas for power generation, has established a linkage between continental prices for gas and electricity. That linkage is one of the factors causing the value of British Columbia's electricity exports to rise roughly in parallel with its natural gas exports.

Over the 1990s, the value of electrical power exports from British Columbia to the United States grew at rates similar to natural gas exports. In 1999 they amounted to $458 million, more than four times their value in 1990. In 2000, they accelerated sharply with price rises, jumping to $1,599 million by November year to date.
But access to that market has not come without conditions. American administrators have pressed for more open and competitive electrical power markets in North America. This has included obliging Canadian provincial power utilities to at least partially de-integrate their business operations as a condition to accessing the U.S. market.

Deintegration is intended to ensure that the generation of power generation, its long distance transmission, and local distribution operate something like separate industries. Some steps have already been taken in this direction, with more to come.

Any changes in continental energy markets will be increasingly important for British Columbia because electricity and natural gas exports to the United States are fast becoming a major source of revenue for the province. However deregulation of continental energy markets could also leave consumers in energy rich British Columbia sharing shortages (and associated price hikes) with consumers in California and other parts of the continent that are less well endowed with energy resources. These concerns could stimulate a great deal of debate in years to come.